Patent claims

1. A process for the plasma cleaning of a component (1), the component (1) being arranged in a chamber (13) having an electrode (10) for initiating a plasma (7), wherein certain parameters (p, d) of the plasma are to be complied with in order to maintain the plasma (7), with at least one parameter (p, d) being varied,

characterized in that

a crack (4), which starts from the surface (22) of the component (1), being cleaned, wherein either

- a constant pressure (p) prevails in the chamber (13) and the distance (d) from the electrode (10) to the surface (22) is varied as a function of the crack depth (t) of the crack (4), or
- the distance (d) from an electrode (10) for initiating a plasma (7) to the surface (22) of the component (1) is kept constant and the pressure (p) of the chamber (13) is varied, or
- both the distance (d) from an electrode (10) to the surface (22) of the component (1), and the pressure (p) within the chamber (13) are varied, with the product of distance (d) and pressure (p) remaining constant.

2. The process as claimed in claim 1, characterized in that

the distance (d) from the electrode (10) to the surface (22) of the component (1) is reduced, in particular continuously, in order to achieve plasma cleaning in the crack (4).

3. The process as claimed in claim 1, characterized in that

the pressure (p) is reduced, in particular continuously, in order for the plasma (7), starting from the surface (22), to effect plasma cleaning in the crack (4).

4. The process as claimed in one of the preceding claims, characterized

in that the component (1) is arranged in a chamber (13), and in that the chamber (13) is supplied with a reactive gas (31), which reacts with a product that is to be removed in the crack (4).

5. The process as claimed in claim 1, characterized in that

the component (1) is a turbine blade or vane (120, 130), a combustion chamber wall (155) or another housing part of a turbomachine, in particular of a turbine (100), in particular of a gas turbine.

6. The process as claimed in claim 1 or 5, characterized in that

the component (1) is a component (1) that is to be refurbished.